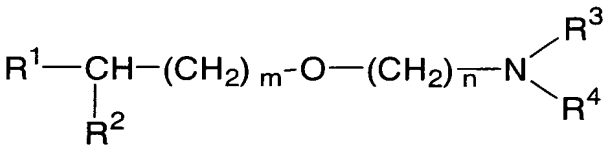
CLAIMS

1. A pharmaceutical composition for improving cerebral function which comprises the following ingredients (A) and (B):

Ingredient (A): An alkyl ether derivative represented by the following formula:



wherein R^1 represents a substituted or unsubstituted heterocyclic group; R^2 represents a hydrogen atom or a hydroxyl group; R^3 and R^4, which may be the same or different, each represents a substituted or unsubstituted alkyl group, or R^3 and R^4, taken conjointly with the nitrogen atom to which R^3 and R^4 are linked, form a substituted or unsubstituted cyclic amino group; m represents an integer of 1 to 5; and n represents an integer of 1 to 6; or a salt thereof,

Ingredient (B): A compound having an acetylcholine esterase inhibitory activity or a salt thereof, which is different from ingredient (A).

2. A pharmaceutical composition for improving cerebral function according to Claim 1, wherein in the formula of ingredient (A), R^1, R^2, R^3, R^4, m and n meet any one of the following conditions (1) to (3):

(1) An alkyl ether derivative wherein R^1 is a

benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group and a phenyl group; R^2 is a hydroxyl group; R^3 is an alkyl group; R^4 is an alkyl group which may be substituted with an alkoxy-substituted phenyl group, or R^3 and R^4, taken conjointly with the nitrogen atom to which R^3 and R^4 are linked, form a pyrrolidine ring, a piperidine ring, a piperazine ring or a morpholine ring; m is 1; and n is 2; or a salt thereof,

(2) An alkyl ether derivative wherein R^1 is a benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group which may be substituted with a hydroxyl group, an alkoxy group, a carboxyl group, an aminocarbonyl group, a hydroxyl group, an alkylthio group, a phenyl group and a pyridyl group; R^2 is a hydrogen atom; R^3 is an alkyl group which may be substituted with a group selected from a phenyl group which may be substituted with a halogen atom, an alkoxy group or a nitro group, an optionally protected hydroxyl group, an alkylamino group and an alkynyl group; R^4 is an alkyl group which may be substituted with a phenyl group; m is 1; and n is 2 to 3; or a salt thereof,

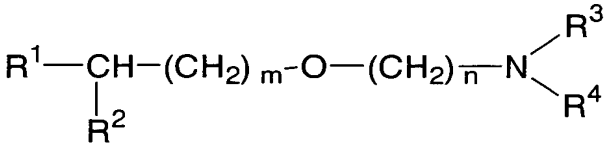
(3) An alkyl ether derivative wherein R^1 is a benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group and a phenyl group; R^2 is a hydrogen

atom; R^3 or R^4 is an alkyl group which may be substituted with a group selected from a hydroxyl group, an optionally protected amino group and an alkylamino group, or R^3 and R^4, taken conjointly with the nitrogen atom to which R^3 and R^4 are linked, form an azetidine ring, a pyrrolidine ring, a piperidine ring, a piperazine ring or a morpholine ring; m is 1; and n is 2 to 3; or a salt thereof.

3. A pharmaceutical composition for improving cerebral function according to Claim 1 or 2, wherein ingredient (B) is at least one compound selected from Tacrine, Donepezil, Rivastigmine, Galanthamine, Huperdine, Ipidacrine, Zanapezil, Phenserine, Quilostigmine, Ganstigmine, Ensaculin and T-82.

4. A method using the following ingredients (A) and (B) in combination in order to improve cerebral function,

Ingredient (A): An alkyl ether derivative represented by the following formula:



wherein R^1 represents a substituted or unsubstituted heterocyclic group; R^2 represents a hydrogen atom or a hydroxyl group; R^3 and R^4, which may be the same or different, each represents a substituted or unsubstituted alkyl group, or R^3 and R^4, taken

conjointly with the nitrogen atom to which R^3 and R^4 are linked, form a substituted or unsubstituted cyclic amino group; m represents an integer of 1 to 5; and n represents an integer of 1 to 6; or a salt thereof,

Ingredient (B): A compound having an acetylcholine esterase inhibitory activity or a salt thereof, which is different from ingredient (A).

5. A method according to Claim 4, wherein in the formula of ingredient (A), R^1, R^2, R^3, R^4, m and n meet any one of the following conditions (1) to (3):

(1) An alkyl ether derivative wherein R^1 is a benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group and a phenyl group; R^2 is a hydroxyl group; R^3 is an alkyl group; R^4 is an alkyl group which may be substituted with an alkoxy-substituted phenyl group, or R^3 and R^4, taken conjointly with the nitrogen atom to which R^3 and R^4 are linked, form a pyrrolidine ring, a piperidine ring, a piperazine ring or a morpholine ring; m is 1; and n is 2; or a salt thereof,

(2) An alkyl ether derivative wherein R^1 is a benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group which may be substituted with a hydroxyl group, an alkoxy group, a carboxyl group, an aminocarbonyl group, a hydroxyl group, an alkylthio group, a phenyl group and a pyridyl group; R^2 is a hydrogen atom; R^3 is an alkyl group which may be

substituted with a group selected from a phenyl group which may be substituted with a halogen atom, an alkoxy group or a nitro group, an optionally protected hydroxyl group, an alkylamino group and an alkynyl group; R^4 is an alkyl group which may be substituted with a phenyl group; m is 1; and n is 2 to 3; or a salt thereof,

(3) An alkyl ether derivative wherein R^1 is a benzothienyl or benzofuranyl group which may be substituted with a group selected from a halogen atom, an alkyl group and a phenyl group; R^2 is a hydrogen atom; R^3 or R^4 is an alkyl group which may be substituted with a group selected from a hydroxyl group, an optionally protected amino group and an alkylamino group, or R^3 and R^4, taken conjointly with the nitrogen atom to which R^3 and R^4 are linked, form an azetidine ring, a pyrrolidine ring, a piperidine ring, a piperazine ring or a morpholine ring; m is 1; and n is 2 to 3; or a salt thereof.

6. A method according to Claim 4 or 5, wherein ingredient (B) is at least one compound selected from Tacrine, Donepezil, Rivastigmine, Galanthamine, Huperzine, Ipidacrine, Zanapezil, Phenserine, Quilostigmine, Ganstigmine, Ensaculin and T-82.